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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,945	12/10/2003	Sugio Makishima	Q78893	6289
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/730,945

**Applicant(s)**

MAKISHIMA, SUGIO

**Examiner**

FAYYAZ ALAM

**Art Unit**

2618

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to applicant's amendment/arguments filed on 2/6/2008.

**This action is made FINAL.**

#### ***Response to Arguments***

Applicant's arguments filed 2/6/2008 have been fully considered but they are not persuasive.

Please see rejection below of independent claims 15 and 27.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 15 - 17, 19 - 23, and 25** are rejected under 35 U.S.C. 102(e) as being anticipated by **Fukuda (USPN 2003/0040346)**.

Consider **claim 15**, Fukuda et al. clearly disclose a portable information terminal (read as portable terminal; see Abstract) with camera, comprising:

a case 10 (read as first housing) and a lid member 12 (read as second housing) which are linked to be displaceable (read as movably connected to each other) (see Figure 1A and [0083]);

an image pick up module (18) (read as image pickup device) is arranged in said case 10 ([0084]); and

an adapter optical system (28) (read as first refractive conversion lens; see [0085]) is arranged in the said lid member 12 (see Figure 1A),

wherein the optical axis of said image pick up module (18) and that of said adapter optical system (28) substantially agree with each other (i.e. identical) when the portable terminal is folded (read as first state where the first housing and the second housing are laid on each other, the image pickup device and the refractive conversion lens have an identical optical axis) so that a focal length of the image pick up module (18) is converted from a focal length in a second state when the portable terminal is not folded (second state where the first housing and the second housing are arranged differently from the first state) ([0091] and [0092]; see figs. 1, 10, and 17),

said portable terminal further comprising a plurality of lens (28A & 28B) (read as second refractive conversion lens), and rotary shaft (14) (read as means for replacing said plurality of lens (read as first refractive conversion lens) with said plurality of lens (read as second refractive conversion lens) (see [0085]; fig. 1B, 2 - 5, 10, 20B, 22, 24 - 25, and 29 - 31). Furthermore, Fukuda explicitly discloses lenses 28 and 18 (read as

second refractive conversion lens, as seen collectively in figs. 1B, 2B, 3B, 24B, where the combined focal length of elements 18 and 28 is interpreted as the second refractive conversion lens) is exchangeable with lens 18 (read as first refractive conversion lens; see figs. 2A, 3A, 24A) by a sliding operation (see fig. 18A&B).

Consider **claim 16**, as applied to claim 15 above, Fukuda et al. discloses a conversion lens with sliding operation in order to vary the focal length of the image pickup device by selecting one of the conversion lenses (see fig. (18A).

Consider **claim 17**, in view claim 16, Fukuda et al. clearly disclose a portable terminal with camera, further comprising of an audio transmitting (20) and receiving device (26) (see Figure 1A; [0084] and [0085]).

Consider **claim 19** as applied to claim 16, Fukuda discloses first and second housings are connected to each other by a hinge mechanism (see fig. 21 and [0006]).

Consider **claim 20** as applied to claim 16, Fukuda discloses the claimed invention except for first and second housings are slidably connected together (see fig. 18A).

Consider **claim 21** as applied to claim 16, Fukuda discloses a third refractive conversion lens exchangeable, by the sliding operation, with said first and second refractive conversion lenses, and wherein the focal length of the image pickup device is converted into one of said plurality of lengths by selecting one of said first, second and third refractive conversion lenses (see figs. 1 - 5).

Consider **claim 22** as applied to claim 21, Fukuda discloses first, second, and third conversions lenses are discrete elements physically and optically separate from each other (see figs. 1 - 31).

Consider **claim 23** as applied to claim 15, Fukuda discloses first and second conversion lenses are discrete elements physically and optically separate from each other (see figs. 1- 31).

Consider **claim 25** as applied to claim 15, Fukuda discloses display section (16) (read as viewfinder) on the rear surface of the housing (see [0089] and fig. 1A).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 18, 24, 26, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fukuda (USPN 2003/0040346)** in view of **Sladen (USPN 2002/0061767)**.

Consider **claim 18**, as applied to claim 16, Fukuda et al. clearly disclose the present invention, but fails to disclose that the conversion lens is a zoom lens.

In the same field of endeavor, Sladen et al. clearly disclose the mirror or lens (read as conversion lens) is a zoom lens ([0037]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the teachings of Sladen with that of Fukuda in order to provide efficiency and robustness to the camera system of a mobile phone where the camera feature in the phone would approach the functionality of a stand alone camera.

Consider **claim 24** as applied to claim 15, Fukuda as modified by Sladen discloses the claimed invention except for an image capturing button on a rear surface of one of said first and second housing.

It would have been an obvious matter of design choice since placing an image-capturing button on the rear surface of the housing or anywhere else has no bearing on the functionality of the disclosed invention as long as there is an image-capturing button.

Consider **claim 26** as applied to claim 15, Fukuda as modified by Sladen discloses the claimed invention except for the group of conversion lens consisting of a fish-eye lens.

It would have been an obvious matter of design choice to include a fish-eye lens since a wide-angle lens and zoom lens is already disclosed according to Sladen (see [0032 & 0037]). In addition, adding a fish-eye lens according to applicant's invention does not solve any proposed problems.

Consider **claim 27**, Fukuda et al. clearly disclose a portable information terminal (read as portable terminal; see Abstract) with camera, comprising:

a case 10 (read as first housing) and a lid member 12 (read as second housing) which are linked to be displaceable (read as movably connected to each other) (see Figure 1A and [0083]);

an image pick up module (18) (read as image pickup device) is arranged in said case 10 ([0084]); and

an adapter optical system (28) (read as first refractive conversion lens; see [0085]) is arranged in the said lid member 12 (see Figure 1A),

wherein the optical axis of said image pick up module (18) and that of said adapter optical system (28) substantially agree with each other (i.e. identical) when the portable terminal is folded (read as first state where the first housing and the second housing are laid on each other, the image pickup device and the refractive conversion lens have an identical optical axis) so that a focal length of the image pick up module (18) is converted from a focal length in a second state when the portable terminal is not folded (second state where the first housing and the second housing are arranged differently from the first state) ([0091] and [0092]; see figs. 1, 10, and 17),



said portable terminal further comprising a plurality of lens (28A & 28B) (read as second refractive conversion lens), and rotary shaft (14) (read as means for replacing said plurality of lens (read as first refractive conversion lens) with said plurality of lens (read as second refractive conversion lens) (see [0085]; fig. 1B, 2 - 5, 10, 20B, 22, 24 - 25, and 29 - 31). Furthermore, Fukuda explicitly discloses lenses 28 and 18 (read as second refractive conversion lens, as seen collectively in figs. 1B, 2B, 3B, 24B, where the combined focal length of elements 18 and 28 is interpreted as the second refractive conversion lens) is exchangeable with lens 18 (read as first refractive conversion lens; see figs. 2A, 3A, 24A) by a sliding operation (see fig. 18A&B).

However, Fukuda does not explicitly disclose lenses are mounted on a rotatable turret and are exchangeable by a rotation operation.

In the related field of endeavor, Sladen discloses second mirror or lens is exchangeable with said first mirror or lens by a rotation operation and first and second mirrors or lenses are mounted on a rotatable turret (see figs. 4, 9 - 13; [0031 - 0034; 0038]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the teachings of Fukuda with that of Sladen in order to provide efficiency and robustness to the camera system of a mobile phone where the camera feature in the phone would approach the functionality of a stand alone camera.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Art Unit: 2618

Examiner should be directed to Fayyaz Alam whose telephone number is (571) 270-1102. The Examiner can normally be reached on Monday-Friday from 9:30am to 7:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Fayyaz Alam*

April 1, 2008

/Edward Urban/

Supervisory Patent Examiner, Art Unit 2618

